

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
22 July 2004 (22.07.2004)

PCT

(10) International Publication Number
WO 2004/060065 A1

(51) International Patent Classification⁷: **A01N 31/06**

(21) International Application Number:
PCT/KR2003/002711

(22) International Filing Date:
11 December 2003 (11.12.2003)

(25) Filing Language: Korean

(26) Publication Language: English

(30) Priority Data:
10-2003-0000825 7 January 2003 (07.01.2003) KR

(71) Applicant (for all designated States except US): **KOREA RESEARCH INSTITUTE OF BIOSCIENCE AND BIOTECHNOLOGY** [KR/KR]; 52, Oun-dong, Yusung-ku, 305-333 Taejeon-si (KR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **KIM, Young-Kook** [KR/KR]; #409-1601 Expo Apt., Jeonmin-dong, Yusung-ku, 305-762 Taejeon-si (KR). **LEE, Hyun-Sun** [KR/KR]; #119-703 Hanbit Apt., Oun-dong, Yusung-ku, 305-333 Taejeon-si (KR). **RHO, Mun-Chual** [KR/KR];

#104-1605 Chonggu-Narae Apt., Jeonmin-dong, Yusung-ku, 305-729 Taejeon-si (KR). **KIM, Koan-hoi** [KR/KR]; #408-1501 Yeolmaemaoul, 858 Jijok-dong, Yusung-ku, 305-330 Taejeon-si (KR). **SONG, Hye-Young** [KR/KR]; #112-1101 Hyundai Apt., Yucheon-dong, Jung-ku, 301-140 Taejeon-si (KR). **KIM, Sung-Uk** [KR/KR]; #2-302 Jugong Apt., 391 Doryong-dong, Yusung-ku, 305-340 Taejeon-si (KR).

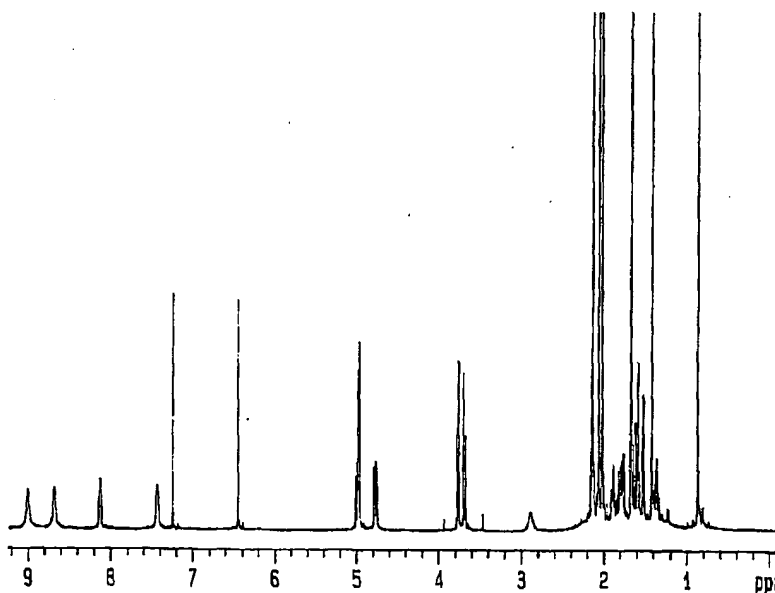
(74) Agent: **LEE, Won-Hee**; 8th Fl., Sung-ji Heights II, 642-16 Yoksam-dong, Kangnam-ku, 135-080 Seoul (KR).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

[Continued on next page]

(54) Title: **INSECTICIDAL COMPOSITIONS COMPRISING COMPOUNDS HAVING INHIBITORY ACTIVITY VERSUS ACYL CoA: CHOLESTEROL ACYLTRANSFERASE OR SALTS THEREOF AS EFFECTIVE INGREDIENTS**



(57) Abstract: The present invention relates to insecticidal compositions comprising compounds having an inhibitory activity versus acyl CoA: cholesterol acyltransferase (ACAT) or salts thereof as effective ingredients. The compounds having inhibitory activity versus ACAT have an excellent insecticidal effect by inhibiting sterol metabolism in noxious insects. Therefore, the compounds of the present invention can be used as safe and effective insecticides.

WO 2004/060065 A1